Application No. 10/780,239

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17 (Cancelled)

Claim 18 (Original) A method for producing silver nano-particle material, comprising:

providing a precursor material in a crucible, the crucible being housed in a
furnace:

heating the precursor material in the crucible to produce a vaporized precursor material;

contacting the vaporized precursor material with a process gas in a mixing region; drawing a mixture of vaporized precursor material and process gas into an inlet end of a conduit, the process gas cooling the vaporized precursor material to precipitate said silver nano-particle material in a carrier stream; and

separating said silver nano-particle material from the carrier stream.

Claim 19 (Original) The method of claim 18, wherein said heating the precursor material in the crucible comprises inductively heating the crucible, heat from the crucible being conducted to the precursor material.

Claim 20 (Original) The method of claim 18, wherein said heating the precursor material in the crucible comprises heating the precursor material to a temperature in the range of about 1600 to about 1800°C.

Claim 21 (Original) The method of claim 18, wherein said method is conducted at a pressure in the range of about 0.1 to about 3 torr.

Claim 22 (Original) The method of claim 18, wherein said contacting the vaporized precursor material comprises contacting the vaporized precursor material with nitrogen.

Claim 23 (Currently amended) The method of elaim 18 A method for producing silver nano-particle material, comprising:

providing a precursor material to a crucible wherein providing the precursor material to the crucible comprises providing the precursor material to the crucible on a continuous basis, the crucible being housed in a furnace;

heating the precursor material in the crucible to produce a vaporized precursor material;

contacting the vaporized precursor material with a process gas in a mixing region;

drawing a mixture of vaporized precursor material and process gas into an inlet
end of a conduit, the process gas cooling the vaporized precursor material to precipitate
said silver nano-particle material in a carrier stream; and

separating said silver nano-particle material from the carrier stream.

Claim 24 (Original) The method of claim 18, wherein said providing the precursor material to the crucible comprises providing metallic silver to the crucible.

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Claim 25 (New) The method of claim 18, wherein the process gas cooling the vaporized precursor material to precipitate said silver nano-particle material in a carrier stream occurs in the conduit.

Claim 26 (New) The method of claim 25, further comprising collecting said silver nanoparticle material.

Claim 27 (New) The method of claim 18, further comprising collecting said silver nanoparticle material.